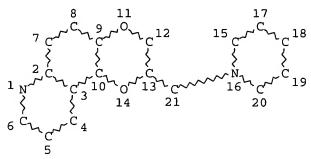
=> d 12

L2 HAS NO ANSWERS

L2

STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC 16 13

NUMBER OF NODES IS 21

STEREO ATTRIBUTES: NONE

=> s 12 ful

L4

FULL SEARCH INITIATED 10:05:30 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 620 TO ITERATE

,

100.0% PROCESSED

620 ITERATIONS

94 ANSWERS

SEARCH TIME: 00.00.01

94 SEA SSS FUL L2

· L5 HAS NO ANSWERS

L5

REP G1=(0-2) CH NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC 18 13
NUMBER OF NODES IS 23

5

STEREO ATTRIBUTES: NONE

=> search 15
ENTER TYPE OF SEARCH (SSS), CSS, FAMILY, OR EXACT:sss
ENTER SCOPE OF SEARCH (SAMPLE), FULL, RANGE, OR SUBSET:subset
ENTER SUBSET L# OR (END):14
ENTER SUBSET SEARCH SCOPE - SAMPLE, FULL, RANGE, OR (END):ful
FULL SUBSET SEARCH INITIATED 10:06:43 FILE 'REGISTRY'
FULL SUBSET SCREEN SEARCH COMPLETED - 94 TO ITERATE

100.0% PROCESSED 94 ITERATIONS SEARCH TIME: 00.00.01

81 ANSWERS

L6

81 SEA SUB=L4 SSS FUL L5

L7 HAS NO ANSWERS

STR

REP G1=(0-2) CH NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RSPEC 18 13

NUMBER OF NODES IS

STEREO ATTRIBUTES: NONE

=> search 17 ENTER TYPE OF SEARCH (SSS), CSS, FAMILY, OR EXACT:sss ENTER SCOPE OF SEARCH (SAMPLE), FULL, RANGE, OR SUBSET: subset ENTER SUBSET L# OR (END):16 ENTER SUBSET SEARCH SCOPE - SAMPLE, FULL, RANGE, OR (END):ful FULL SUBSET SEARCH INITIATED 10:07:49 FILE 'REGISTRY' FULL SUBSET SCREEN SEARCH COMPLETED -81 TO ITERATE

100.0% PROCESSED 81 ITERATIONS SEARCH TIME: 00.00.01

L8 72 SEA SUB=L6 SSS FUL L7

=> d scan

72 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN L8

1H-Indole-6-carbonitrile, 1-[[1-[(2S)-2,3-dihydro-8-methyl-1,4-IN dioxino[2,3-f]quinolin-2-yl]methyl]-4-piperidinyl]methyl]- (9CI)

72 ANSWERS

MF C28 H28 N4 O2

CI COM

Absolute stereochemistry.

L7

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> fil caplus
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 240.44 240.65

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 10:08:03 ON 11 APR 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 11 Apr 2005 VOL 142 ISS 16 FILE LAST UPDATED: 10 Apr 2005 (20050410/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

≈> s 18

L9 6 L8

=> d bib abs 1-6

L9 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:550738 CAPLUS

DN 141:89093

TI Preparation of azaheterocyclylmethyl derivatives of heterocycle-fused benzodioxans as antidepressants

IN Zhou, Dahui; Stack, Gary Paul

PA USA

SO U.S. Pat. Appl. Publ., 26 pp., Cont.-in-part of U.S. Provisional Ser. No.

410,168.

CODEN: USXXCO

Patent DT LΑ English

FAN.CNT 2

PAIV.	PATENT	NO.		KIND DATE			1	APPL	ICAT		DATE				
ΡĪ	US 2004	132714		A1	2004	1	US 2	003-		20030910					
	WO 2004	024730		A1 20040325			1	WO 2	003-1		20030911				
	W:	AE, A	3, AL,	AM,	AT, AU,	AZ,	BA,	BB,	BG,	BR,	ΒY,	ΒŻ,	CA,	CH,	CN,
		CO, CI	R, CU,	CZ,	DE, DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	GE,
		GH, GI	1, HR,	HU,	ID, IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,
		LR, L	5, LT,	LU,	LV, MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,
		PG, PI	I, PL,	PT,	RO, RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	TJ,	TM,	TN,
		TR, T	r, TZ,	UA,	UG, US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW			
	RW:	GH, GI	1, KE,	LS,	MW, MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
		KG, K	Z, MD,	RU,	TJ, TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI, F	R, GB,	GR,	HU, IE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
		BF, B	CF,	CG,	CI, CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
PRAI	US 2002	-410168	3P	P	2002	0912								•	
	US 2003	-65916	7	A	2003	0910									
os	MARPAT	141:890	93												
GI															

$$X = \begin{bmatrix} CH_2 \\ Y \end{bmatrix} = \begin{bmatrix} CH_2 \\ CH_2 \end{bmatrix} \begin{bmatrix} CH_2 \\ D \end{bmatrix} = \begin{bmatrix} CH_2 \\ CH_2 \end{bmatrix} \begin{bmatrix} CH_2 \\ D \end{bmatrix} = \begin{bmatrix} CH_2 \\ CH_2 \end{bmatrix} \begin{bmatrix} CH_2 \\ D \end{bmatrix} = \begin{bmatrix} CH_2 \\ D \end{bmatrix} \begin{bmatrix} CH_2 \\$$

$$Q^{1} =$$

$$R^{3}$$

$$R^{2}$$

$$R^{2}$$

AB (azaheterocyclylmethyl)heterocycle-fused benzodioxan derivs. {Q = Q1, Q2; R1, R2, R3, X, Y = H, HO, halo, cyano, carboxamido, C2-6 carboalkoxy, CF3, C1-6 alkyl, C1-6 alkoxy, C2-6 alkanoyl, C2-6 alkanoyloxy, amino, mono- or di(C1-6 alkyl)amino, C2-6 alkanamido, C1-6 alkanesulfonyl, C1-6 alkanesulfonamido; or X and Y, taken together, form -N:C(R4)C(R5):N-, -N:C(R4)C(R6):CH-, -N:C(R4)N:CH-, -N:C(R4)O-, -NHC(R7):N- or -NHC(R8):CH-;R4, R5 = H, halo, amino, mono- or di(C1-6 alkyl)amino, C1-6 alkyl; R8 = H, C1-6 alkyl; R7 = H, halo, CF3, pentafluoroethyl, amino, mono- or di(C1-6 alkyl)amino, C1-6 alkyl; R8 = H, halo, CF3, pentafluoroethyl, C1-6 alkyl; Z = 0, S, or NR9 (R9 = H, C1-6 alkyl); n = an integer 0, 1, or 2; m = aninteger from 1 to 4, provided that $m+n\leq 4$ and that when m=n=2, and Q is Q2 then X and Y are not NH-C(R8):CH-; p = an integer from 1 to 3, provided that p+n = 2 or 3] or pharmaceutically acceptable salts thereof are prepared These compds. inhibit serotonin reuptake and are antagonists of the 5HT1A receptor and are useful for the treatment of depression (including but not limited to major depressive disorder, childhood depression and dysthymia), anxiety, panic disorder, post-traumatic stress disorder, premenstrual dysphoric disorder (also known as pre-menstrual

syndrome), attention deficit disorder (with and without hyperactivity), obsessive compulsive disorder, social anxiety disorder, generalized anxiety disorder, obesity, eating disorders such as anorexia nervosa and bulimia nervosa, vasomotor flushing, cocaine and alc. addiction, sexual dysfunction and related illnesses. Thus, a solution of (2R)-4bromobenzenesulfonic acid (8-methyl-2,3-dihydro-[1,4]dioxino[2,3f]quinolin-2-yl)methyl ester (0.35 g, 0.80 mmol), 3-[(azetidin-3yl)methyl]-5-fluoro-1H-indole (0.19 g, 0.96 mmol), and Et3N (0.16 mL, 1.2 mmol) in DMSO (20 mL) was heated at 90° under nitrogen overnight to give, after workup and silica gel chromatog., (S)-2-[[3-[(5-Fluoro-1Hindol-3-yl)methyl]azetidin-1-yl]methyl]-8-methyl-2,3-dihydro-[1,4]dioxino[2,3-f]quinoline (II) as a brown oil which was converted into the dihydrochloride. II.2HCl and (S)-1-[2-[1-[(8-Methyl-2,3-dihydro-[1,4]dioxino[2,3-f]quinolin-2-yl)methyl]azetidin-3-yl]ethyl]-1H-indole-6carbonitrile showed an affinity to 5-HT1A serotonin receptor in displacing [3H]8-OHDPAT (dipropylaminotetralin) from 5-HT1A serotonin receptor in CHO cells with Ki of 2.50 and 1.52 nM, resp.

```
L9 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
```

AN 2004:252517 CAPLUS

DN 140:287397

TI Preparation of piperidine derivatives of heterocycle-fused benzodioxans as serotonin reuptake inhibitors and 5-HTlA receptors antagonists for treating depression

IN Webb, Michael Byron; Stack, Gary Paul; Asselin, Magda; Evrard, Deborah Ann

PA Wyeth, John, and Brother Ltd., USA

PCT Int. Appl., 74 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

SO

GI

```
PATENT NO.
                        KIND
                               DATE
                                         APPLICATION NO.
                                                                DATE
                              20040325 WO 2003-US28523
                                                               -----
     ------
                        ----
PΙ
    WO 2004024733
                        A1
                                                               20030911
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
            GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
            LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM,
            PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
            TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
            FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                         US 2003-659160
    US 2004147523
                        A1
                               20040729
PRAI US 2002-410033P
                         Ρ
                               20020912
    MARPAT 140:287397
OS
```

$$R^{1}$$
 Q
 Z
 R^{2}
 R^{2}

The title compds. (shown as I; variables defined below; e.g. II), useful AB for the treatment of depression (including but not limited to major depressive disorder, childhood depression and dysthymia), anxiety, panic disorder, post-traumatic stress disorder, premenstrual dysphoric disorder (also known as premenstrual syndrome), attention deficit disorder (with and without hyperactivity), obsessive compulsive disorder, social anxiety disorder, generalized anxiety disorder, obesity, eating disorders such as anorexia nervosa and bulimia nervosa, vasomotor flushing, cocaine and alc. addiction, sexual dysfunction and related illnesses, were prepared For I: R1, R2 and R3 = H, OH, halo, CN, carboxamido, carboalkoxy, CF3, alkyl, alkoxy, alkanoyl, alkanoyloxy, NH2, mono- or dialkylamino, alkanamido, alkanesulfonyl or alkanesulfonamido; X, Y = H, OH, halo, CN, carboxamido, carboalkoxy, CF3, alkyl, alkoxy, alkanoyl, alkanoyloxy, amino, mono- or dialkylamino, alkanamido, alkanesulfonyl or alkanesulfonamido, or X and Y, taken together, form -N:C(R4)-C(R5):N-, -N:C(R4)-C(R6):CH-, -N:C(R4)-N:CH-, -N:C(R4)-O-, -NH-C(R7):N- or -NH-C(R8):CH-; R4 and R5=H, halo, amino, mono- or dialkylamino; R6 = H, alkyl; R7 = H, halo, CF3, pentafluoroethyl, amino, mono- or dialkylamino; R8 = H, halo, CF3, pentafluoroethyl, alkyl; the dotted line = an optional double bond; Z = 0, S; Q = C, N; n = 0-1; addnl. details are given in the claims. Althoughthe methods of preparation are not claimed, 14 example prepns. are included. For example, II was prepared by reacting [(2R)-8-methyl-2,3dihydro[1,4]dioxino[2,3-f]quinolin-2-yl]methyl 4-toluenesulfonate with 4-(benzo[b]thiophen-3-yl)-1,2,3,6-tetrahydropyridine in DMSO. The compds. I were tested for serotonin transporter affinity, 5-HTlA receptor affinity, and antagonistic activity at 5-HT1A receptors, and biol. data were given for all exemplified compds. The pharmaceutical composition comprising the compound I is claimed.

Ι

ΙI

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L9 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 2004:252514 CAPLUS
- DN 140:287395
- TI Preparation of antidepressant azaheterocyclylmethyl derivs. of heterocycle-fused benzodioxans
- IN Zhou, Dahui; Stack, Gary Paul
- PA Wyeth, John, and Brother Ltd., USA
- SO PCT Int. Appl., 75 pp.

CODEN: PIXXD2

US 2003-659167

OS GI MARPAT 140:287395

DT Patent LA English FAN.CNT 2

KIND APPLICATION NO. DATE PATENT NO. DATE ------------**--**-WO 2003-US28413 ΡI WO 2004024730 A1 20040325 20030911 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2003-659167 US 2004132714 A1 20040708 Ρ 20020912 PRAI US 2002-410168P

20030910

Ι

$$X \xrightarrow{\mathbb{R}^1} O \xrightarrow{\mathbb{R}^1} \mathbb{C}H_2]_{\overline{p}} Q$$

Α

The title compds. [I; Q = II, III; R1-R3 = H, OH, halo, CN, carboxamido, AΒ etc.; X, Y = H, OH, halo, CN, etc.; or X and Y, taken together, form N:CR4CR5:N, N:CR4CR5:CH, N:CR4N:CH, N:CR4O, NHCR7:N, NHCR8:CH; R4, R5 = H, halo, NH2, mono- or dialkylamino, alkyl; R6 = H, alkyl; R7 = H, halo, CF3, etc.; R8 = H, halo, CF3, etc.; Z = O, S, NR9; R9 = H, alkyl; n = 0-2; m =1-4 (with provisos); p = 1-3 (p+n = 2-3)], useful for the treatment of depression (including but not limited to major depressive disorder, childhood depression and dysthymia), anxiety, panic disorder, post-traumatic stress disorder, premenstrual dysphoric disorder (also known as premenstrual syndrome), attention deficit disorder (with and without hyperactivity), obsessive compulsive disorder, social anxiety disorder, generalized anxiety disorder, obesity, eating disorders such as anorexia nervosa and bulimia nervosa, vasomotor flushing, cocaine and alc. addiction, sexual dysfunction and related illnesses, were prepared Thus, reacting 4-bromobenzenesulfonic acid (2R)-8-methyl-2,3dihydro[1,4]dioxino[2,3-f]quinolin-2-ylmethyl ester with 3-azetidin-3-ylmethyl-5-fluoro-1H-indole in the presence of Et3N in DMSO afforded (2S)-2-[3-(5-fluoro-1H-indol-3-ylmethyl)azetidin-1-ylmethyl]-8methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline. The exemplified compds. I were tested for 5-HT transporter affinity, 5-HT1A receptor affinity, and

antagonistic activity at 5-HT1A receptors and biol. data were given. The pharmaceutical composition comprising the compound I is claimed.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:888742 CAPLUS

DN 137:384846

TI Process for preparation of indolylpyridinylmethyldioxinoquinolines and related compounds

IN Chan, Anita Wai-Yin; Curran, Timothy Thomas; Iera, Silvio; Chew, Warren; Sellstedt, John Hamilton; Vid, Galina; Feigelson, Gregg; Ding, Zhixian

PA Wyeth, John and Brother Ltd., USA

SO PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

								APPLICATION NO.						DATE						
PI	WO	2002	0926	02	A2 20021121 A3 20030227			1					20020514							
		W: AE, AG, CO, CR, GM, HR, LS, LT, PL, PT,			AL, CU, HU, LU,	AM, CZ, ID, LV,	AT, DE, IL, MA,	AU, DK, IN, MD,	AZ, DM, IS, MG,	BA, DZ, JP, MK,	EC, KE, MN,	EE, KG, MW,	ES, KP, MX,	FI, KR, MZ,	GB, KZ, NO,	GD, LC, NZ,	GE, LK, OM,	GH, LR, PH,		
		RW:	GH, CY,	GM, DE,	KE, DK,	LS, ES,	MW, FI,	MZ, FR,	ZM, SD, GB, GA,	SL, GR,	SZ, IE,	TZ, IT,	UG, LU,	ZM, MC,	ZW, NL,	AT, PT,	BE, SE,	CH, TR,		
										US 2002-145369						20020514				
					B2 20040217										20020514					
	EP									EP 2002-736790 GB, GR, IT, LI, LU,										
		R:							MK,				шт,	шо,	мп,	SE,	MC,	FI,		
	BR	2002											9901	20020514						
	JP	2004	5306	93		Т2		2004	1007		JP 2	002-	5894	20020514						
										US 2003-734867										
PRAI	US	JS 2001-291547P P						2001	0517											
		2002																		
		2002																		
OS GI	CA:	SREAC'	T 13	7:38	4846	; MAI	RPAT	137	:384	846										

Ι

alkyl, alkanoyloxy, amino, mono- or dialkylamino, alkanamido, alkanesulfonamido; R2, R3, R4, R6 = H, OH, halo, cyano, carboxamido, carboalkoxy, CF3, alkyl, alkoxy, alkanoyloxy, amino, mono- or dialkylamino, alkanamido, alkanesulfonamido; R5 = H, alkyl; dotted line = optional double bond; A, D = CR1, N; provided that \geq 1 of A and D = N; E, G = CR1; Z = N, CR6], were prepared by a 7-step process. Thus, [(2R)-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinolin-2-yl]methyl 4-methylbenzenesulfonate (preparation given), 3-(1,2,3,6-tetrahydropyridin-4-yl)-1H-indole (preparation given) and K2CO3 were heated in THF:DMF at 80-83° for 10 h to give 72% (2S)-2-[4-(1H-indol-3-yl)-3,6-dihydro-2H-pyridin-1-ylmethyl]-8-methyl-2,3-dihydro-1,4-dioxino[2,3-f]quinoline.

```
L9 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
```

AN 2002:849635 CAPLUS

DN 137:353035

TI Preparation of azaheterocyclylmethyl derivatives of 2,3-dihydro-1,4-dioxino[2,3-f]quinoline as 5-HT1A antagonists

IN Stack, Gary Paul; Tran, Megan; Gross, Jonathan Laird; Husbands, George Edward Morris

PA Wyeth, John, and Brother Ltd., USA

SO PCT Int. Appl., 37 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

GI

	PATE	KIND DAT		DATE		i	APPL	I CAT	ION I	NO. DATE									
ΡI	WO 2002088132					A1 20021107			1	WO 2	002-1	US13		20020425					
	Ţ	W: AE, AG, AL,			AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,		
		1	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
	GM, HR, HU,		ID,	ΙL,	IN,	IS,	JΡ,	ΚE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,				
	LS, LT, LU,		LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,				
	PL, PT, RO,			RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,			
		UA, UG, UZ, RW: GH, GM, KE, CY, DE, DK,		UZ,	VN,	YU,	ZA,	ZM,	ZW,	AM,	AZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM	
	I			LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	BE,	CH,			
				DK,	ES,	FΙ,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,		
	BF, BJ, CF,				CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG		
	US 2002193366					A1	20021219			US 2002-131997						20020425			
	US 68			B2	:	2004	1123												
PRAI	I US 2001-286567P							2001	0426										
OS	MARPAT 137:353035																		

$$\mathbb{R}^{1}$$

$$\mathbb{R}^{2}$$

$$\mathbb{R}^{2}$$

$$\mathbb{R}^{2}$$

$$\mathbb{R}^{2}$$

Ι

N, CR3; Y = N, CH; R3 = H, alkyl; Z = (un) substituted pyrrolidino, piperidino, morpholino, etc.], useful for the treatment of disorders, such as anxiety, aggression and stress, and for the control of various physiol. phenomena, such as appetite, thermoregulation, sleep and sexual behavior, were prepared E.g., a 9-step synthesis of (S)-II, starting from 5-nitroguaiacol and allyl bromide, which showed IC50 of 1.44 nM when tested for 5-HT1A receptor affinity, was given. L9 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN 2002:716282 CAPLUS AN DN 137:247706 TI Preparation of antidepressant azaheterocyclylmethyl derivatives of 2,3-dihydro-1,4-dioxino[2,3-f]quinoline ΙN Tran, Megan; Stack, Gary Paul PA Wyeth, John, and Brother Ltd., USA SO PCT Int. Appl., 66 pp. CODEN: PIXXD2 DTPatent LΑ English FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE ____ -----_______ -----WO 2002072587 PΙ A1 20020919 WO 2002-US7192 20020312 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 6458802 В1 20021001 US 2002-95505 20020312 US 2002165245 A1 20021107 EP 1392697 A1 20040303 EP 2002-721325 20020312 EP 1392697 В1 20041103 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR Ε 20041115 AT 2002-721325 20020312 US 2003045542 **A**1 20030306 US 2002-228744 20020827 US 6599915 B2 20030729 PRAI US 2001-275564P Ρ 20010314

US 2002-95505

WO 2002-US7192

MARPAT 137:247706

OS

GΙ

Α1

W

20020312

20020312

The title compds. [I; R1 = H, halo, CN, etc.; R2 = H, OH, halo, etc.; X =

AB The title compds. [I; R1 = H, OH, halo, CN, etc.; R2-R5, R7 = H, OH, halo, etc.; R6 = H, alkyl; A, D = CR1, N (provided that at least one of A and D = N); E, G = CR1; Z = N, CR7; n = 0-2], useful for the treatment of depression (including but not limited to major depressive disorder, childhood depression and dysthymia), anxiety, panic disorder, post-traumatic stress disorder, premenstrual dysphoric disorder (also known as premenstrual syndrome), attention deficit disorder (with and without hyperactivity), obsessive compulsive disorder, social anxiety disorder, generalized anxiety disorder, obesity, eating disorders such as anorexia nervosa, bulimia nervosa, vasomotor flushing, cocaine and alc. addition, sexual dysfunction and related illnesses, were prepared Thus, reacting (2R)-2,3-dihydro[1,4]dioxino[2,3-f]quinolin-2-ylmethyl-4-methylbenzenesulfonate (multi-step preparation given) with

5-methoxy-3-(1,2,3,6-

tetrahydro-4-pyridyl)-1H-indole in DMSO afforded (S)-II. All 23 prepared compds. I were tested in the three standard exptl. tests for serotonin 5-HTlA receptor activity (biol. data given).

Ι

ΙI

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN
L1
AN
    2004:252517 CAPLUS
DN
    140:287397
ΤI
    Preparation of piperidine derivatives of heterocycle-fused benzodioxans as
    serotonin reuptake inhibitors and 5-HT1A receptors antagonists for
    treating depression
    Webb, Michael Byron; Stack, Gary Paul; Asselin, Magda; Evrard, Deborah Ann
IN
PA
    Wyeth, John, and Brother Ltd., USA
SO
    PCT Int. Appl., 74 pp.
    CODEN: PIXXD2
DT
    Patent
    English
LΑ
FAN.CNT 1
                     KIND DATE APPLICATION NO.
    PATENT NO.
                                                             DATE
                                                             -----
    ----
                      ----
                                       -----
                             20040325 WO 2003-US28523
PΙ
    WO 2004024733
                       A1
                                                             20030911
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
            GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
            LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM,
            PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
            TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
```

FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG 20040729 US 2003-659160

MARPAT 140:287397 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 9 ALL CITATIONS AVAILABLE IN THE RE FORMAT

20020912

A1

Ρ

=> analyze 11 ENTER ANSWER NUMBER OR RANGE (1-):1 ENTER DISPLAY CODE (TI) OR ?:rn L2 ANALYZE L1 1 RN : 74 TERMS

=> fil reg COST IN U.S. DOLLARS

US 2004147523

PRAI US 2002-410033P

SINCE FILE TOTAL ENTRY SESSION 13.94 14.15

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 07:16:32 ON 14 APR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 13 APR 2005 HIGHEST RN 848462-79-3 DICTIONARY FILE UPDATES: 13 APR 2005 HIGHEST RN 848462-79-3

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

20030910

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> s 12 L3 74 L2

=> s 13 and ?quinol?

LEFT TRUNCATION IGNORED FOR '?QUINOL?' FOR FILE 'REGISTRY'

690992 QUINOL?

L4 28 L3 AND ?QUINOL?

Left truncation is not valid in the specified search field in the specified file. The term has been searched without left truncation. Examples: '?TERPEN?' would be searched as 'TERPEN?' and '?FLAVONOID' would be searched as 'FLAVONOID.'

If you are searching in a field that uses implied proximity, and you used a truncation symbol after a punctuation mark, the system may interpret the truncation symbol as being at the beginning of a term. Implied proximity is used in search fields indexed as single words, for example, the Basic Index.

=> s 14 and benz? 6409182 BENZ? L5 23 L4 AND BENZ?

=> d scan

L5 23 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(5-fluorobenzo[b]thien-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI)

MF C26 H23 F N2 O2 S

CI COM

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):22

L5 23 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN 1,4-Dioxino[2,3-f]quinoline, 2-[(4-benzo[b]thien-3-yl-3,6-dihydro-1(2H)-pyridinyl)methyl]-2,3-dihydro-, (2S)-, ethanedioate (1:1) (9CI) C25 H22 N2 O2 S . C2 H2 O4

CM 1

Absolute stereochemistry.

CM 2

23 ANSWERS L5 REGISTRY COPYRIGHT 2005 ACS on STN

IN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(5-chlorobenzo[b]thien-3-y1)-3,6dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) C26 H23 Cl N2 O2 S

MF

COM CI

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 REGISTRY COPYRIGHT 2005 ACS on STN 23 ANSWERS

IN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[(phenylmethoxy)methyl]-, (2S)- (9CI)

C20 H19 N O3 MF

Absolute stereochemistry. Rotation (+).

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 23 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(5-fluorobenzo[b]thien-3-yl)-3,6dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-8-methyl-, (2S)-, ethanedioate
(1:1) (9CI)

MF C26 H23 F N2 O2 S . C2 H2 O4

CM 1

Absolute stereochemistry.

CM 2

L5 23 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN Pyridinium, 4-benzo[b]thien-7-yl-1-[[(2S)-2,3-dihydro-8-methyl-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-, salt with 4-bromobenzenesulfonic acid (1:1) (9CI)

MF C26 H21 N2 O2 S . C6 H4 Br O3 S

CM 1

CM 2

L5 23 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(5-chlorobenzo[b]thien-3-y1)-3,6dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-8-methyl-, (2S)-, ethanedioate (1:1) (9CI) C26 H23 Cl N2 O2 S . C2 H2 O4

MF

CM

Absolute stereochemistry.

CM 2

L5 23 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN Benzenesulfonic acid, 4-bromo-, [(2R)-2,3-dihydro-8-methyl-1,4-dioxino[2,3-f]quinolin-2-yl]methyl ester (9CI)

MF C19 H16 Br N O5 S

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 23 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN 1,4-Dioxino[2,3-f]quinoline, 2-[[3,6-dihydro-4-(7-methoxy-3-benzofuranyl)-1(2H)-pyridinyl]methyl]-2,3-dihydro-8-methyl-, (2S)-(9CI)

MF C27 H26 N2 O4

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 23 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN 1,4-Dioxino[2,3-f]quinoline, 2-[(4-benzo[b]thien-7-yl-3,6-dihydro-

1(2H)-pyridinyl)methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI)

MF C26 H24 N2 O2 S

CI COM

Absolute stereochemistry.

Claim 26

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 23 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(2-benzoxazolyl)-1piperidinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI)

MF C25 H25 N3 O3

là 30

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L5 23 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
- IN 1,4-Dioxino[2,3-f]quinoline, 2-[(4-benzo[b]thien-3-yl-3,6-dihydro-1(2H)-pyridinyl)methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI)
- MF C26 H24 N2 O2 S
- CI COM

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L5 23 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
- IN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(5-fluorobenzo[b]thien-3-yl)-3,6-dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (2S)- (9CI)
- MF C25 H21 F N2 O2 S
- CI COM

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 23 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN 1,4-Dioxino[2,3-f]quinoline, 2-[(4-benzo[b]thien-7-yl-3,6-dihydro1(2H)-pyridinyl)methyl]-2,3-dihydro-8-methyl-, (2S)-, ethanedioate (1:1)
(9CI)

MF C26 H24 N2 O2 S . C2 H2 O4

CM 1

Absolute stereochemistry.

CM 2

L5 23 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN 1,4-Dioxino[2,3-f]quinoline-2-methanol, 2,3-dihydro-,
4-methylbenzenesulfonate (ester), (2R)- (9CI)

MF C19 H17 N O5 S

¢

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 23 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

1 1,4-Dioxino[2,3-f]quinoline, 2-[(4-benzo[b]thien-3-yl-3,6-dihydro1(2H)-pyridinyl)methyl]-2,3-dihydro-8-methyl-, (2S)-, ethanedioate (1:1)
(9CI)

MF C26 H24 N2 O2 S . C2 H2 O4

CM 1

CM 2

L5 23 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(5-fluorobenzo[b]thien-3-yl)-3,6dihydro-1(2H)-pyridinyl]methyl]-2,3-dihydro-, (2S)-, ethanedioate (1:1)
(9CI)

MF C25 H21 F N2 O2 S . C2 H2 O4

CM 1

Absolute stereochemistry.

CM 2

L5 23 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(2-benzofuranyl)-3,6-dihydro-1(2H)pyridinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI)

MF C26 H24 N2 O3

ك نان 2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 23 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN 1,4-Dioxino[2,3-f]quinoline-2-methanol, 2,3-dihydro-8-methyl-,
4-methylbenzenesulfonate (ester), (2R)- (9CI)

MF C20 H19 N O5 S

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 23 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN 1,4-Dioxino[2,3-f]quinoline, 2-[(4-benzo[b]thien-2-yl-3,6-dihydro1(2H)-pyridinyl)methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI)

MF C26 H24 N2 O2 S

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 23 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN 1,4-Dioxino[2,3-f]quinoline, 2-[(4-benzo[b]thien-3-yl-3,6-dihydro1(2H)-pyridinyl)methyl]-2,3-dihydro-, (2S)- (9CI)

MF C25 H22 N2 O2 S

CI COM

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 23 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(2-benzofuranyl)-1-piperidinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI)

MF C26 H26 N2 O3

JE = 28

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

REGISTRY COPYRIGHT 2005 ACS on STN L5 23 ANSWERS

IN 2-Propanol, 1-[(5-bromo-2-methyl-6-quinolinyl)oxy]-3-(phenylmethoxy)-, (2S) - (9CI) C20 H20 Br N O3

MF

Absolute stereochemistry. Rotation (+).

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED